Bone
allograft
for acetabular reconstruction in hip arthroplasty, 788
bacterial contamination of, 677
impacted, recoil and strength of, 1019
blood flow, after reaming and intramedullary canal preparation, 220
ingrowth
implant fixation by, 355
physiology of, 355
with porous tantalum acetabular component, 347
remodeling
in cemented total hip arthroplasty, 149
in cementless total hip arthroplasty, factors affecting, 637
with hydroxyapatite-coated hip prosthesis, 689
after impaction grafting during hip revision, 849
stiffness, and bone remodeling
in cemented total hip arthroplasty, 149
in cementless total hip arthroplasty, 637
Bone and Joint Decade 2000–2010, 901
Bone cement. *See* **Cement**
Bone compaction
and porous implant fixation, 91
Bone grafting
for acetabular reconstruction in hip arthroplasty, 788
with morcellized allograft
biomechanical properties of, 1019
handling of, 233
with ring support, for acetabular reconstruction, 788
in total knee arthroplasty, 144
autogenous, tibial flip technique for, 172
Bone mass
improved mobility and, 64
Bone mineral density
and bone remodeling in cementless total hip arthroplasty, 637
measurement
by dual-energy x-ray absorptiometry, 957
by quantitative computed tomography, 64
periprosthetic
around uncemented knee prosthesis, measurement of, 957
temporal changes in, 71
preoperative, and tibial component migration in total knee arthroplasty, 77
after total hip arthroplasty for femoral neck fracture, 64
Bone morphogenetic proteins
and bone ingrowth, 355
Bone tumor
malignant, rotating-hinge knee replacement for, 187
Book reviews
The Hip, Clement B. Sledge ed., 122
Revision Total Knee Arthroplasty, by Paul A. Lotke and Jonathon P. Garino, 517

CAD/CAM design
of hip prosthesis, 682
Calcium phosphate coatings
and bone ingrowth, 355
Cancer
incidence in hip replacement patients, cohort study of, 272
of knee joint, rotating-hinge replacement for, 187
Care pathways in total knee arthroplasty
streamlined, cost effectiveness of, 182
subacute rehabilitation in, 761
Cartilage
degeneration, repetitive pressure and, 52
Cement
antibiotics in
biomechanical effects of, 339
and cement spacers for infected hip arthroplasty, 764
elution kinetics of, 339
in vitro elution of, 209
extrusion during primary total hip arthroplasty, 832
femoral mantle, voids in, and outcome, 1005
in hip revision surgery with impaction grafting, and bone regeneration, 849
impaction allografting of proximal femur and, 59
pressure, in total hip arthroplasty, 514
pressurization, acetabular, measurement *in vivo*, 854
removal during revision hip surgery, ultrasonic instruments for, 235
in total hip arthroplasty, and collared versus collarless femoral components, 123
in total knee arthroplasty, 3, 9
Cementless fixation
for hip arthroplasty
acetabular cups with dome screws and, 925
after acetabular fracture, follow-up study of, 827
and acetabular fracture during acetabular component insertion, 426
alumina sockets for, 701
catastrophic failure of, 918
early polyethylene wear and osteolysis in, 976
femoral bone remodeling after, factors affecting, 637
with Harris-Galante femoral component, 915
with hydroxyapatite-coated hip prosthesis, 689
late failure of polyethylene liner fixation and, 391
outcome assessment with, 581
in Paget's disease of hip, 872
polyethylene wear and osteolysis in, 714
and porous-coated acetabular cups in revision surgery, 397
and porous-coated anatomic total hip prosthesis, 538
with proximally porous-coated second-generation cementless hip prosthesis, 930
for knee arthroplasty, and tibial component migration, 77
Cement pressurizer
and acetabular cement pressurization, 854
Cement restrictor
in total hip arthroplasty, 628
Cerclage wiring
after proximal femoral fracture in total hip arthroplasty, 98
Charnley hip prosthesis
in rheumatoid patients, survivorship analysis, 657
and Spectron hip prosthesis, comparison of
clinical evaluation, 407
radiographic evaluation, 414
Chondromalacia
of femoral head in elderly, 200
CMW bone cement
elution characteristics of, *in vitro* study of, 209
Cohort study
of cancer incidence in hip replacement patients, 272
Complement
activated, in drainage blood after total knee arthroplasty, 312
Computed tomography
of glenoid morphology in primary glenohumeral osteoarthritis, 756
measurement of femoral axis in knee replacement, 1030
quantitative, for bone mineral density measurement, 64
of sciatic nerve compression secondary to wear debris in hip arthroplasty, 771
Condylar lift-off
in mobile-bearing total knee arthroplasty, 293
Contact pressure
after total knee arthroplasty, 493
Contamination control
in bone allograft retrieval, recommendations for, 677
Cost effectiveness
of streamlined care pathways and product standardization in total knee arthroplasty, 182
Costs
of hip arthroplasty, evaluations in literature, 527
and implant selection, 281
of one- versus two-stage bilateral hip replacement, 439
of perioperative x-rays, 669

Cytokines
release by macrophage-like cells
in response to polyethylene, 840
in response to titanium, 840
Deep venous thrombosis
prevention of
enoxaparin for, bleeding complications with, 432
foot compression therapy in, 333, 651
intraoperative heparin therapy in, 651
after total hip arthroplasty, 456
after total knee arthroplasty, 651
after total hip arthroplasty, incidence of, 456

Dialysis
long-term, and total hip arthroplasty, 571
d-Dimer
in drainage blood after total knee arthroplasty, 312
Dislocation
of hip, unilateral congenital, tibial length discrepancy with, 867
of hip arthroplasty
neuromuscular function and, 319
risk factors for, 662
with S-ROM constrained hip, closed reduction of, 882
of total hip replacement, natural history of, 964
Disseminated intravascular coagulation
in total hip arthroplasty, 239
Dual-energy x-ray absorptiometry
bone mineral density measurement by, around uncemented knee prosthesis, 957
Duracon Total Knee Arthroplasty System
follow-up studies of, 446

Economics
of arthroplasty surgery, 669
of hip arthroplasty, evaluations in literature, 527
Elbow joint
hemiarthroplasty of, in rheumatoid arthritis, 553
Elderly
degenerative change in normal femoral heads in, 200
nonagenarian, total knee arthroplasty in, 911
revision hip surgery in, 38
Emboli
after total knee arthroplasty, 227
Enoxaparin
for deep venous thrombosis prophylaxis, bleeding complications with, 432
Eosinophil cationic protein
in drainage blood after total knee arthroplasty, 312
Eosinophil protein X
in drainage blood after total knee arthroplasty, 312
Epidural anesthesia
hypotensive, and prevention of venous thromboembolism after total hip arthroplasty, 456

Factor XIII
and bone ingrowth, 355
Fat emboli
after total knee arthroplasty, 227
Femoral axis
in knee replacement, CT scout film for measurement of, 1030
Femoral head
degenerative change in, in elderly, 200
displacement, effect on strain measurements, 215
osteonecrosis
alcohol-induced, 672
idiopathic, 672
partial surface replacement for, 45
steroid-induced, 672
position in total hip arthroplasty, prediction of, 102
Femoral intramedullary plug
composite, in cemented total hip arthroplasty, 369

Femur
anteversion, and total hip arthroplasty, 682
geometric alterations after surgery, effect on strain measurements, 215
head. *See* **Femoral head**
implanted and intact, loading systems for, effect on strain measurements, 215
lateral insufficiency fractures of, in total hip arthroplasty, 982
malignant tumors of, rotating-hinge knee replacement for, 187
neck, fracture, osteosynthesis for, bone loss after, 64
overconstraint of, effect on strain measurements, 215
proximal
blood flow in, after reaming and intramedullary canal preparation, 220
fracture in total hip arthroplasty, cerclage wiring after, 98
impaction allografting of, 59
implantable devices for, stress shielding measurements for, errors affecting, 215
remodeling
after cementless total hip arthroplasty, factors affecting, 637
after impaction grafting during hip revision, 849
supracondylar fracture above knee arthroplasty, Ilizarov external fixator for, 118
Fibrinogen
in drainage blood after total knee arthroplasty, 312
Fibrinopeptide A
in drainage blood after total knee arthroplasty, 312
Fibrin tissue adhesive
and hemostasis after knee arthroplasty, 481
Finite element analysis
for stress analysis in combined hip–knee replacements, 945
Fixation strength
bone ingrowth and, 355
of porous implant, effect of bone compaction on, 91
of total knee arthroplasty, biomechanics of, 610
Flexion contracture
severe, total knee arthroplasty with, 775
Follow-up studies
of allograft reconstruction for extensor lag after total knee arthroplasty, 892
of arthroscopy in periprosthetic hip infection, 903
of cementless bulk alumina socket, 701
of cementless total hip arthroplasty for Paget's disease of hip, 872
of Charnley low-friction arthroplasty in rheumatoid patients, 657
of Freeman press-fit hip arthroplasty, 581
of hydroxyapatite coating versus cemented tibial component in total knee arthroplasty, 9
of Insall-Burstein prosthesis, 560
of kinematic total knee arthroplasty, 473
of low-contact stress knee prosthesis, 815
of major bone transplantation in total knee arthroplasty, 144
of polyethylene wear and osteolysis in cementless total hip arthroplasty, 714
of porous-coated acetabular cups in revision surgery, 397
of proximally porous-coated second-generation cementless hip prosthesis, 930
of second-generation acetabular cups with dome screws, 925
of total hip arthroplasty after acetabular fracture, 827
of total hip arthroplasty for osteoarthritis and osteonecrosis, 21
of total hip arthroplasty for osteonecrosis, 21
of total hip arthroplasty with hydroxyapatite-coated prosthesis, 689
of trochanteric reattachment in revision total hip arthroplasty, 810
of wear rates of ceramic-on-ceramic bearing surfaces, 781
Foot compression
sequential, after knee arthroplasty, 333, 651

Fracture
acetabular
during cementless acetabular component insertion, 426
total hip arthroplasty after, 827
femoral
lateral insufficiency, in total hip arthroplasty, 982
proximal, in total hip arthroplasty, cerclage wiring after, 98
of femoral component, after knee arthroplasty, with polyethylene wear and osteolysis, 375
femoral neck, osteosynthesis for, bone loss after, 64
hip
hemiarthroplasty for, 200
perioperative warfarin responses in patients with, 724
unsolved, in elderly, 200
stress, of patella, after total knee arthroplasty, 383
supracondylar femoral, above total knee arthroplasty, Ilizarov external fixator for, 118
of tibial tray, after total knee arthroplasty, 112
of unresurfaced patella, after total knee arthroplasty, 895
Freeman press-fit hip arthroplasty
outcome assessment with, 581

Gait
heel-strike of, *in vivo* analysis of osteoarthritic knee brace during, 738
rotating-hinge total knee arthroplasty and, 743
and tibial component fixation in knee arthroplasty, 589
Gait analysis
in patients with total knee arthroplasty, 589
Ganglion cyst
of proximal tibiofibular joint, after total knee arthroplasty, 766
Glenoid morphology
in primary glenohumeral osteoarthritis, 756
Gout
avascular necrosis caused by, 383
recurrence, after total knee arthroplasty, 380
Gram stain
intraoperative, in revision arthroplasty, 500, 952

Harris-Galante first-generation cementless acetabular component
late failure of polyethylene liner fixation with, 391
Harris-Galante uncemented femoral component
in primary total hip arthroplasty, results, 915
Health status
assessment of, SF-36 for, 576
changes, in total joint replacement, 576
Hemiarthroplasty
elbow joint, in rheumatoid arthritis, 553
hip
in elderly, 200
repetitive pressure with, and cartilage degeneration, 52
Hemorrhage
intrahepatic, after low-molecular-weight heparin use, 372
after knee arthroplasty, prevention of, fibrin tissue adhesive and, 481
Hemostasis
after knee arthroplasty, fibrin tissue adhesive and, 481
Heparin, low-molecular-weight
for hip arthroplasty, intrahepatic hemorrhage after, 372
for thromboprophylaxis, bleeding complications with, 372, 432
Heterotopic ossification, postoperative
indomethacin prophylaxis for
dosage and administration of, 796
and psychosis, 769
Hip
dysplasia
developmental, acetabular reconstruction in, 131
femoral anteversion with, and total hip arthroplasty, 682
fracture, perioperative warfarin responses in patients with, 724
hemiarthroplasty
in elderly, 200
repetitive pressure with, and cartilage degeneration, 52
Paget's disease of, cementless total hip arthroplasty for, 872
periprosthetic infection in, cementless fixation in two-stage reimplantation for, 175
prosthesis
CAD/CAM design of, 682
hydroxyapatite-coated, 689
stress shielding measurements for, errors affecting, 215
septic arthritis of, from spread of adductor pyomyositis, 886
ultrasound study of polyethylene wear and synovitis in, after arthroplasty, 138
unilateral congenital dislocation of, tibial length discrepancy with, 867
unsolved fracture of, 200
Hip arthroplasty
acetabular cement pressurization in, measurement *in vivo*, 854
acetabular components for
fully congruent, multidirectional deformation in, 1011
metal-backed, 976
modular, and ultra-high-molecular-weight polyethylene wear, 860
acetabular reaming in, inaccuracy of, under surgical conditions, 730
allograft acetabular reconstruction in, 788
aortobifemoral bypass graft thrombosis after, 386
arterial complications of, 386
aseptic loosening of, autonomic neuropeptides in interface membrane and, 594
bilateral, one- versus two-stage, 439
cancer incidence in patients with, 272
cemented
bone remodeling in, 149
Charnley-type stem for, 59
collared versus collarless femoral components in, 123
composite femoral intramedullary plug in, 369
cortical defects in, repair of, 514
stem stiffness, and bone remodeling after, 149
technique for, 514
cementless
acetabular component insertion in, acetabular fracture during, 426
acetabular cups with dome screws and, 925
after acetabular fracture, follow-up study of, 827
catastrophic failure of, 918
early polyethylene wear and osteolysis in, 976
femoral bone remodeling after, factors affecting, 637
with Harris-Galante uncemented femoral component in, results, 915
late failure of polyethylene liner fixation in, 391
with nonporous-coated stem, catastrophic failure of, 918
outcome assessment with, 581
in Paget's disease of hip, 872
polyethylene wear and osteolysis in, 714
with proximally porous-coated second-generation cementless hip prosthesis, 930
with subtrochanteric derotational osteotomy, 682
temporal changes in periprosthetic bone density with, 71
cement restrictor in, 628
ceramic-on-ceramic bearing surfaces in, wear rates of, 781
Charnley low-friction, in rheumatoid patients, survivorship analysis, 657
Charnley versus Spectron hip prosthesis for
clinical evaluation, 407
radiographic evaluation, 414
clinical hip scoring systems used after, value of, 1024
in combination hip–knee total joint arthroplasty, 945
cross-linked ultra-high-molecular-weight polyethylene acetabular components for, 616
deformation of acetabular polyethylene liner and backside gap in, 464

for developmental dysplasia, using acetabular reinforcement ring with hook, 131
dislocation, with S-ROM constrained hip, closed reduction of, 882
disseminated intravascular coagulation after, 239
economic evaluations of, in literature, 527
femoral head center position in, prediction of, 102
femoral head offset in, prediction of, 102
Freeman press-fit, outcome assessment with, 581
health status changes in, 576
heterotopic ossification after, indomethacin prophylaxis for
dosage and administration of, 796
psychosis caused by, 769
hybrid alumina-alumina, with cementless bulk alumina socket, survivorship analysis, 701
with hydroxyapatite-coated prosthesis, 689
implant selection in, factors affecting, 281
incomplete seating of acetabular ring during, 869
and indomethacin-induced postoperative psychosis, 769
infection
antibiotic cement spacer molding method for, 764
arthroscopic management of, 903
inguinal abscess caused by, 630
intermittent clamping of suction drains in, effects on postoperative blood loss, 470
lateral insufficiency fractures of femur in, 982
leg-length equalization during, 159
long-term follow-up of, 21
in long-term renal dialysis patients, 571
low-molecular-weight heparin for, intrahepatic hemorrhage after, 372
McKee-Farrar metal-on-metal prosthesis for, loosening of, 326
metal-on-metal, failure of, 877
with normalized and proportionalized cemented femoral stem, survivorship analysis, 708
for osteoarthritis, 21
for osteonecrosis, 21
after osteosynthesis for femoral neck fracture, bone loss after, 64
outcome
assessment, 576
voids in femoral cement mantle and, 1005
after partial surface replacement for osteonecrosis of femoral head, 45
perioperative warfarin responses in patients with, 724
plasticity-induced damage layer as precursor to wear in, 616
polyethylene wear and synovitis in, 138
porous tantalum acetabular component for, tissue response to, 347
posteriorly dislocated, natural history of, 964
postoperative blood loss in, reduction of, 470
postoperative stability, acetabular cup orientation and, 509
preoperative planning for, 102
primary
with cementless porous-coated anatomic prosthesis, 538
dislocation after, risk factors for, 662
Harris-Galante uncemented femoral component in, results, 915
posterior distal cement extrusion during, 832
prostheses for
clinical evaluation of, 407
radiographic evaluation of, 414
proximal femoral fracture in, cerclage wiring after, 98
recurrent dislocation after, neuromuscular function and, 319
revision
cemented, with impaction grafting, and bone regeneration, 849
cement removal during, ultrasonic instruments for, 235
in elderly, 38
handling of morcellized bone graft during, 233
impaction allografting of proximal femur and, 59
intraoperative Gram stain in, 500, 952
methods of repairing cortical defects in, 514
porous-coated cementless acetabular cups for, 397
sciatic nerve injury associated with, recovery of, 305
trochanteric reattachment in, outcome assessment, 810
sciatic nerve injury associated with, recovery of, 305
S-ROM constrained, closed reduction of dislocation with, 882
for subcapital hip fracture in elderly, 200
thromboprophylaxis in, enoxaparin for, bleeding complications with, 432
venous thromboembolism after, incidence of, 456
warfarin therapy after, computer-assisted monitoring of, 988
Hip–knee total joint arthroplasty
combination, design and application of, 945
Hip scoring systems
in evaluation after total hip arthroplasty, 1024
Hip Society
awards, 518
Histamine
in drainage blood after total knee arthroplasty, 312
Histology
of surgical tissues, in immunosuppressed patient, 108
Humeral head
subluxation, and glenoid morphology in primary glenohumeral osteoarthritis, 756
Hydroxyapatite coating
for hip prosthesis, in total hip arthroplasty, 689
of tibial component in total knee arthroplasty, 9
Hydroxyapatite-tricalcium phosphate coating
acetabular cups with and without, 266

Ilizarov external fixator
for supracondylar femoral fracture above total knee arthroplasty, 118
Implant failure
in knee arthroplasty, prodromal signs of, 488
reoperation for limb salvage with, results, 519
Implant selection
in total hip arthroplasty, factors affecting, 281
in total knee arthroplasty, factors affecting, 281
Indomethacin
prophylaxis for heterotopic ossification
dosage and administration of, 796
postoperative psychosis caused by, 769
Infection
diagnosis and management of, in revision arthroplasty, 500
diagnosis during revision arthroplasty, intraoperative Gram stain and, 500, 952
and gout recurrence after total knee arthroplasty, 380
of hip, from spread of adductor pyomyositis, 886
in hip arthroplasty
antibiotic cement spacer molding method for, 764
arthroscopic management of, 903
inguinal abscess caused by, 630
periprosthetic, cementless fixation in two-stage reimplantation for, 175
Inferior lateral geniculate artery
pseudoaneurysm of, after total knee arthroplasty, 633
Insall-Burstein II posterior-stabilized total knee arthroplasty
for osteoarthritis, long-term results with, 560
patellofemoral complications with, 288
Interface distance
and bone ingrowth, 355
International Normalized Ratio
perioperative warfarin responses and, 724
Irrigation
for particulate debris removal after cemented total knee arthroplasty, 549

Kinematics
of knee
in meniscal-bearing total knee arthroplasty, 82
in mobile-bearing total knee arthroplasty, 293
of total knee arthroplasty, 473, 493

Knee
alignment, after total knee arthroplasty, 566
extensor mechanisms, allograft reconstruction of, 892
flexion-extension gaps, after lateral ligament release for valgus in total knee arthroplasty, 994
flexion instability, after lateral ligament release for valgus in total knee arthroplasty, 994
kinematics
in meniscal-bearing total knee arthroplasty, 82
in mobile-bearing total knee arthroplasty, 293
malignant tumors of, rotating-hinge replacement for, 187
osteoarthritis of, and popliteal artery position, 800
post-traumatic arthrosis of, total knee arthroplasty for, 969
Knee arthroplasty
articulating surface congruency in, 165
blood transfusion after
immediate versus delayed administration of, 647
predonated autologous blood for, 647
cemented
gout recurrence after, 380
irrigation for particulate debris removal after, 549
tibial radiolucent lines in, 3
cementless, tibial component migration in, 77
in combination hip–knee total joint arthroplasty, 945
Duracon Total Knee Arthroplasty System for, follow-up studies of, 446
edge loading of patellar components after, 493
embolic debris after, analysis of, 227
after excision of malignant tumor, rotating-hinge knee for, 187
extensor apparatus reconstruction in, 204
extensor lag after, allograft reconstruction for, 892
failure, prodromal signs of, 488
femoral axis in, computed tomography scout film for measurement of, 1030
fixation strength of, biomechanics of, 610
foot compression therapy after, 333, 651
fracture of femoral component after, with polyethylene wear and osteolysis, 375
HDP wear in, 3
health status changes in, 576
hemostasis after, fibrin tissue adhesive and, 481
implant selection in, factors affecting, 281
Insall-Burstein II posterior-stabilized, patellofemoral complications with, 288
intraoperative heparin therapy in, 651
kinematic, 473
knee alignment after, 566
lateral release with, 29, 197, 300
for valgus deformity correction, cadaver study of, 994
long-term complications of, 473
low-contact stress
complications of, 815
follow-up evaluation of, 815
lytic lesions in, 3, 9
major bone transplantation in, 144
meniscal-bearing, knee stability in, 82
midvastus approach in
incision for, 505
muscle-splitting, and median parapatellar approach, comparison of, 29
and paramedian approach, comparison of, 33
surgical anatomy of, 505
mobile-bearing, condylar lift-off and screw-home in, 293
outcome assessment in, 576
patellar component for
all-polyethylene, failure of, 940
design of, 603
patellar contact forces with and without patellar resurfacing in, 603
patellar stress fracture after, 383
patellar tendon rupture after, patellotibial fusion for, 115
patellar tilt after, 300
patellofemoral complications of, eliminating, 446
patellofemoral tracking during, effect on tourniquet on, 197
in patients 90 years old and older, 911
popliteal artery injury in, 800, 803
for post-traumatic arthrosis, 969
primary, wear debris particles and polyethylene surface damage in, 165
product standardization in, cost effectiveness of, 182
proximal tibiofibular joint cyst after, 766
pseudoaneurysm of inferior lateral geniculate artery after, 633
rehabilitation after, 29, 33
reinfused drainage blood after, quality of, 312
revision, intraoperative Gram stain in, 500
rotating-hinge
characteristics of, 187
effects on gait and stair stepping, 743
with severe flexion contracture, 775
for steroid-induced osteonecrosis, 533
streamlined care pathways in, cost effectiveness of, 182
subacute rehabilitation after, tool to measure need for, 761
supracondylar femoral fracture above, Ilizarov external fixator for, 118
surgical approaches for, 29, 33, 505
thromboprophylaxis in, enoxaparin for, bleeding complications with, 432
tibial component for, 3, 9
fixation of, gait and, 589
migration of, preoperative bone mineral density and, 77
torsional stability of, 610
tibial flip autograft technique in, 172
tibial tray fracture after, 112
unusual patellar complication after, 895
valgus deformity correction in, lateral structure release for, cadaver study of, 994
varus deformity correction in, 172
Knee brace
osteoarthritic, *in vivo* analysis of, during heel-strike of gait, 738

Laser Doppler flowmetry
of bone blood flow in proximal femur, 220
Lavage
for cemented total knee arthroplasty, 549
Leeds-Keio ligament
and extensor apparatus reconstruction in total knee arthroplasty, 204
Leg-length difference
equalization, during total hip arthroplasty, 159
Letters to the Editor
Re: Influence of Intramedullary Versus Extramedullary Alignment: Guides on Final Total Knee Arthroplasty Component Position, 898
Ligament
prosthetic, and extensor apparatus reconstruction in total knee arthroplasty, 204
Limb alignment
determination of, in total knee arthroplasty, 566
and wear, in total knee arthroplasty, 566
Limb salvage
reoperation results for, 519
Liver
hemorrhage in, after low-molecular-weight heparin use, 372
Lymphoma
diagnosis of, in shoulder arthroplasty, 108

Matched-pair analysis
of total hip arthroplasty for osteoarthritis and osteonecrosis, 21
McKee-Farrar metal-on-metal hip prosthesis
loosening of, 326
Metallosis
with uncemented total hip arthroplasty, 391

Muscle function
and dislocated total hip arthroplasty, 319
Musculoskeletal disease
prevention of, 901
treatment of, 901
Myeloperoxidase
in drainage blood after total knee arthroplasty, 312

Neurologic function
and dislocated total hip arthroplasty, 319
Neuropeptides
autonomic, in interface membrane, and aseptic loosening of hip prosthesis, 594
Neuropeptide Y
in interface membrane, and aseptic loosening of hip prosthesis, 594
Nonagenarians
total knee arthroplasty in, 911
Non-Hodgkin's lymphoma
diagnosis of, in shoulder arthroplasty, 108
Norepinephrine
in interface membrane, and aseptic loosening of hip prosthesis, 594

Obituary
Wolfgang Küsswetter, 645
Osseointegration
implant fixation by, 355
physiology of, 355
with porous tantalum acetabular component, 347
Osteoarthritis
femoral anteversion with, and total hip arthroplasty, 682
Insall-Burstein total knee arthroplasty for, long-term results with, 560
of knee, and popliteal artery position, 800
knee brace for, *in vivo* analysis of, during heel-strike of gait, 738
primary glenohumeral, glenoid morphology in, 756
total hip arthroplasty for, 21
Osteolysis
in cementless total hip arthroplasty, 391
nonporous-coated stem and, 918
polyethylene wear and, 714
with cementless total hip arthroplasty, 976
of hip arthroplasty, with Harris-Galante uncemented femoral component, 915
after knee arthroplasty, and fracture of femoral component, 375
with metal-on-metal total hip arthroplasty, 877
Osteonecrosis
alcohol-induced, of femoral head, 672
femoral head, 672
idiopathic, of femoral head, 672
steroid-induced
of femoral head, 672
total knee arthroplasty for, 533
total hip arthroplasty for, 21
Osteonecrosis of femoral head
partial surface replacement for, 45
Osteopenia
and lateral insufficiency fracture of femur, 982
Osteoporosis
knee prosthesis and, 957

Paget's disease
of hip, cementless total hip arthroplasty for, 872
Palacos-R bone cement
elution characteristics of, *in vitro* study of, 209
Particle disease
in vitro model of, 840
Patella
all-polyethylene, for total knee arthroplasty, failure of, 940
contact forces, with and without patellar resurfacing in total knee arthroplasty, 603
postoperative tilt of, after total knee arthroplasty, 300
stress fracture of, after total knee arthroplasty, 383
unresurfaced, fracture, after total knee arthroplasty, 895
Patellar tendon
rupture
reconstruction of, in total knee arthroplasty, 204
after total knee arthroplasty, patellotibial fusion for, 115
Patellofemoral joint
complications
with Insall-Burstein II posterior-stabilized total knee arthroplasty, 288
after total knee arthroplasty, 300, 446
contact forces, with and without patellar resurfacing in total knee arthroplasty, 603
intraoperative tracking during total knee arthroplasty, tourniquet effect on, 197
kinematics, after total knee arthroplasty, 493
Patellotibial fusion
for patellar tendon rupture after total knee arthroplasty, 115
Patient
and implant selection, 281
Peroneal nerve
compression, with synovial cyst of proximal tibiofibular joint after total knee arthroplasty, 766
Plasminogen activator inhibitor-1
in drainage blood after total knee arthroplasty, 312
Pneumatic compression
sequential, of foot, after knee arthroplasty, 333, 651
Poem
"Eulogy to a Knee," by Sherwin Kaufman, 265
Polyethylene
cytokine release by macrophage-like cells in response to, 840
and failure of all-polyethylene patellar component after total knee arthroplasty, 940
liner, for hip arthroplasty
deformation of, 464
late failure of fixation of, 391
multidirectional deformation of, 1011
surface damage in knee arthroplasty, wear debris and, 165
ultra-high-molecular-weight, wear
acetabular components and, 860
backside, 860
after knee arthroplasty, 566
plasticity-induced damage layer as precursor to, 616
after total hip arthroplasty, 860
wear
early, in cementless total hip arthroplasty, 976
after hip arthroplasty, 138, 1011
after knee arthroplasty, and fracture of femoral component, 375
and osteolysis in cementless total hip arthroplasty, 714
in uncemented acetabular cup system components, 635
Popliteal artery
anatomic location of
in arthritic knee, 800
and midvastus approach in total knee arthroplasty, 505
and total knee arthroplasty, 803
Porous-coated implants
acetabular cups with and without hydroxyapatite–tricalcium phosphate coating, 266
anatomic total hip prosthesis, cementless, 538
bone ingrowth fixation with, factors affecting, 355, 391
fixation of, effect of bone compaction on, 91
late failure of polyethylene liner fixation with, 391
proximally porous-coated second-generation cementless hip prosthesis, results with, 930
in revision surgery, 397
Post-traumatic arthrosis
of knee, total knee arthroplasty for, 969
Postural stability
and dislocated total hip arthroplasty, 319

Pressure
contact, after total knee arthroplasty, 493
repetitive, in mechanogenesis of cartilage degeneration, 52
Prothrombin time
of drainage blood after total knee arthroplasty, 312
Pseudoaneurysm
of inferior lateral geniculate artery, after total knee arthroplasty, 633
Psychosis
postoperative, indomethacin-induced, 769
Pulmonary embolism
after total hip arthroplasty, incidence of, 456
after total knee arthroplasty, 227
Pyomyositis
spread to hip, 886

Radiolucent lines
and acetabular cups with and without hydroxyapatite–tricalcium phosphate coating, 266
definition of, 1
nomenclature for, 1
tibial, in cemented total knee arthroplasty, 3
in total knee arthroplasty, 3, 9
Radiostereometric analysis
of porous-coated acetabular cups, 266
of total knee arthroplasty fixation, 9, 77, 144
Range of motion
acetabular cup orientation and, 509
Rehabilitation
subacute, after total knee arthroplasty, tool to measure need for, 761
Reimplantation
two-stage, for infected hip arthroplasty, 175
Renal failure
dialysis for, and total hip arthroplasty, 571
Reoperation
for limb salvage, results, 519
Revision arthroplasty. *See also* **Hip arthroplasty, revision**
intraoperative Gram stain in, 500, 952
Rheumatoid arthritis
Charnley low-friction arthroplasty in, survivorship analysis, 657
hemiarthroplasty of elbow joint in, 553
shoulder arthroplasty in, 108

Sciatic nerve injury
associated with total hip arthroplasty, recovery of, 305
secondary to total hip arthroplasty wear debris, 771
Screw-home rotation
in mobile-bearing total knee arthroplasty, 293
Septic arthritis
of hip, from spread of adductor pyomyositis, 886
Shoulder arthroplasty
non-Hodgkin's lymphoma diagnosed in, 108
in rheumatoid arthritis, 108
routine specimen analysis in, 108
Spectron hip prosthesis
Charnley hip prosthesis and, comparison of
clinical evaluation, 407
radiographic evaluation, 414
Stair stepping
rotating-hinge total knee arthroplasty and, 743
Steroid-induced osteonecrosis
of femoral head, 672
total knee arthroplasty for, 533
Stress shielding
with hydroxyapatite-coated hip prosthesis, 689
measurements for hip prostheses, errors affecting, 215
Subacute rehabilitation
after total knee arthroplasty, tool to measure need for, 761
Surface geometry
and bone ingrowth, 355
Survivorship analysis
of alumina-alumina hip replacement with cementless bulk alumina socket, 701
of Charnley low-friction arthroplasty in rheumatoid patients, 657
of normalized proportionalized femoral stem, 708
Synovial cyst
of proximal tibiofibular joint, after total knee arthroplasty, 766
Synovitis
after hip arthroplasty, ultrasound study of, 138

Tantalum
porous, tissue response to, 347
Third-body wear
cemented total knee arthroplasty and, 549
Thromboembolic disease, prevention
after total hip arthroplasty, 456
after total knee arthroplasty, 651
Thromboembolism
venous, after total hip arthroplasty, prevention of, 456
Thrombosis, prevention
enoxaparin for, bleeding complications with, 432
foot compression therapy in, 333, 651
intraoperative heparin therapy in, 651
Tibia
length discrepancy, with unilateral congenital dislocation of hip, 867
malignant tumors of, rotating-hinge knee replacement for, 187
proximal, preoperative bone mineral density, and tibial component migration, 77
Tibial component for total knee arthroplasty
cemented, 3, 9
Freeman-Samuelson, 3
hydroxyapatite coating for, 9
migration of, preoperative bone mineral density and, 77
uncemented, 77
Tibial tray
fracture, after total knee arthroplasty, 112
Tibiofibular joint
proximal, synovial cyst of, after total knee arthroplasty, 766
Titanium
cytokine release by macrophage-like cells in response to, 840
Tobramycin
in acrylic bone cement, biomechanical effects and elution kinetics of, 339
Total joint arthroplasty
combined hip–knee, design and application of, 945
hip. *See* **Hip arthroplasty**
knee. *See* **Knee arthroplasty**
Tourniquet
and intraoperative patellofemoral tracking during total knee arthroplasty, 197

Ultrasound
in cement removal during revision hip surgery, 235
study of polyethylene wear and synovitis, after hip arthroplasty, 138

Valgus deformity
correction in total knee arthroplasty, lateral structure release for, cadaver study of, 994
Vancomycin
in acrylic bone cement, biomechanical effects and elution kinetics of, 339
pharmacokinetics of, after elution from acrylic bone cement, 339
Varus angulation
and lateral insufficiency fracture of femur, 982

Varus deformity
correction, in total knee arthroplasty, 172
Vasoactive intestinal polypeptide
in interface membrane, and aseptic loosening of hip prosthesis, 594

Warfarin
computer-assisted monitoring of, after total hip arthroplasty, 988
perioperative response to, factors affecting, 724
Wear analysis
in hip arthroplasty
for acetabular component with polyethylene liner deformation, 464
for acetabular cups with and without hydroxyapatite–tricalcium phosphate coating, 266
for ceramic-on-ceramic bearing surfaces, 781
for McKee-Farrar metal-on-metal total hip replacement, 326
for metal-on-metal arthroplasty, 877
with osteolysis in cementless total hip replacement, 714
for radiation–cross-linked ultra-high-molecular-weight polyethylene, 616
for sciatic nerve injury secondary to, 771
for ultra-high-molecular-weight polyethylene, 860
ultrasound in, 138
for uncemented acetabular cup system components, 635
in knee arthroplasty
articulating surface congruency and, 165
implant design and, 165
for ultra-high-molecular-weight polyethylene, 566

X-rays
perioperative, outcome and cost of, 669

Author Index: Volume 14, 1999

Abbott, Robert D., 481
Adolphson, Per, 64
Aglietti, Paolo, 560
Ahmed, M., 594
Akisue, Toshihiro, 1011
Alfaro-Adrian J., 439
Alho, Antti, 305
Altintaş, Faik, 112
Amstutz, Harlan C., 326
Anderson, G. I., 220
Andrews, M., 38
Aracil, Jose, 204
Arnoczky, Steven P., 91
Aroca, Jose E., 204
Arredondo, Jorge, 108
Athanasian, Edward A., 187
Atkinson, Robert E., 432
Austin, C., 239

Badet, Roger, 756
Balas, Mark S., 91
Barth, Patrick, 647, 911
Bauer, Thomas W., 165, 464, 849, 1011
Bayona, F., 439
Belmar, Carlos J., 911
Benroth, Robert, 576
Bentley, George, 945
Ben-Zvi, Y., 333
Bergström, J., 594
Berry, Daniel J., 426
Besjakov, Jack, 319
Bindelglass, David F., 761
Bizot, Pascal, 701
Blyth, Phil, 380
Bobyn, J. D., 71
Bobyn, J. Dennis, 347
Bogner, Eric, 781
Boland, Patrick J., 187
Bono, James V., 456, 810
Boulahia, Aziz, 756
Brause, Barry D., 903
Breakwell, L. M., 239
Brinker, Mark R., 118
Broodryk, Alan P., 628
Brooks, C. E., 71
Brueggemann, P. M., 470
Brumpt, B., 45
Bryce, Sharon L., 677
Buck, Walter R., 505
Busch, Constant A., 59
Buzzi, Roberto, 560

Cabanela, Miguel E., 21
Callaghan, John J., 426
Calton, Thomas F., 175
Cameron, John C., 115
Cannon, Stephen R., 945
Caprini, J. A., 988
Carey, Christopher, 872
Carlsson, Lars, 9
Carlsson, Lars V., 730
Cass, Joseph R., 869
Castro, Frank P., Jr., 672
Chan, K. Casey, 300
Chao, Edmund Y. S., 519
Charnley, G., 45
Charnley, G. J., 800
Charnley, Godfrey J., 730
Chaudhuri, C., 383
Cheah, S. K., 854
Chen, Frank S., 781
Chen, Tain-Hsiung, 822
Chen, Wen-Jer, 976
Cheng, Cheng-Kung, 375, 940
Cheng, Chen-Kung, 822
Cho, Soon-Ho, 538
Choe, Wahn-Sub, 714
Chou, Li-Shan, 743
Christ, David J., 771
Christie, Michael, 339
Clark, John, 832
Clohisy, John C., 915
Coglon, Timothy, 832
Colwell, Clifford W., Jr., 869
Cook, Elizabeth F., 647
Cooper, R. Edward, Jr., 505
Costigan, William M., 882
Crane, Deborah J., 616
Crane, Hal S., 293
Cristofolini, Luca, 215
Crothers, Omar D., 869
Curtin, William A., 481

Dahlborn, Mats, 64
Dal,n, Nils, 64
Dal,n, Tore, 9
Dalury, David F., 33
Dawson, John M., 339
Dean, John C., 803
DeBoer, David, 339
De Felice, Riccardo, 560
Della Valle, Craig J., 500, 781
Dennis, Douglas A., 293, 738
Desai, Panna, 500
Deshmukh, R. G., 895
Di Cesare, Paul E., 500, 781
Di Cesare, Paul E., 509
Donnelly, Robert S., 386
Dorr, Lawrence D., 149
Downing, Nicholas D., 628
Drabu, Khalid, 59
Draganich, Louis F., 743
Duffy, Gavan, 533
Duncan, Clive P., 59, 209, 952

Eastell, R., 957
Ebramzadeh, Edward, 326
Edidin, Avram A., 616
Edmondson, Kristie, 123
ElMaraghy, A. W., 220
Engh, C. Anderson, Jr., 637
Engh, Charles, Sr., 637
Eshkenazi, A. U., 333
Essig, Karin, 761
Eulert, Jochen, 840
Ewald, Frederick C., 473
Eyres, Keith S., 235

Farhan, M. J., 383
Faris, Philip M., 29, 123, 964
Farkas, Peter, 227
Farrar, M. J., 1030
Farrell, Chris, 456
Farrington, W. J., 800
Fehring, Thomas K., 175
Femino, Jon E., 227
Finn, Henry A., 743
Fischer, Steven R., 771
Fisher, David A., 925
Fishkin, Zair, 98
Fitzgerald, Robert H., Jr., 886
Fleming, P. A., 867
Fox, B. M., 800
Franceschina, Michael J., 172
Frankel, Victor H., 781
Fredin, Hans, 319
Freedman, Kevin B., 886
Freeman, M. A. R., 1, 3, 901
Friedman, Shep J., 677

Gabriel, S. M., 603
Gafni, Amiram, 527
Ganz, Reinhold, 131, 982
Garcia-Cimbrelo, Eduardo, 397
Garellick, Göran, 407, 414, 1024
Garino, Jonathan P., 647
Garrison, Susan, 761
Gawande, Sulochana, 576
Gerhardt, Michael B., 882
Getty, C. J., 957
Getty, C. J. M., 239
Gibbon, Anthony J., 766
Gill, Gurdev S., 300
Gill, Thomas J., 131, 982

Gillespie, W. J., 594
Giron, Francesco, 560
Glaser, Francis E., 493
Goldberg, Victor M., 803
Goodman, N. Craig, 481
Gorab, Robert S., 493
Graham, Jove, 877
Green, John R., 91
Griffin, William L., 175
Griss, P., 355
Gross, Allan E., 527

Haas, David W., 339
Hacking, S. Adam, 347
Haddad, F. S., 788
Hadden, William A., 630
Hagen, Chad, 832
Hahn, Gregory V., 886
Hallett, John W., 386
Hamadouche, Moussa, 701
Hämäläinen, M. M. J., 657
Han, Chang-Dong, 714
Han, Seung-Moo, 98
Hanssen, Arlen D., 426
Hansson, Ulrik, 144
Harimaya, Katsumi, 566
Harries, S. R., 800
Harris, Mitchel B., 672
Harris, William H., 915
Hartford, James M., 159
Harwin, Steven F., 898
Hasegawa, Yukiharu, 918
Hashimoto, Yasushi, 464
Hawkins, Christopher A., 708
Healey, John H., 187
Hedlundh, Urban, 319
Helmers, Scott, 549
Hendel, D., 333
Herberts, P., 266
Herberts, Peter, 407, 414, 1024
Hernandez, R. A., 669
Hernigou, Ph., 1005
Heyligers, I. C., 391
Hilding, Maria B., 589
Hirakawa, Kazuo, 165
Houde, John P., 372
Hozack, William J., 281, 426, 571, 872
Hsu, Robert Wen-Wei, 519
Hua, Jia, 682
Huang, Chun-Hsiung, 375, 940
Huang, Zhen, 724
Hughes, P. M., 800
Humeniuk, B., 220
Hungerford, David S., 446, 930
Huo, Michael H., 517, 827
Hviid, Kirsten, 312
Hyman, Jon L., 903

Ireland, John, 892
Iwamoto, Yukihide, 566
Iwasada, Seiki, 918
Iwata, Hisashi, 918
Iyer, Sangamithra, 509

Jacobsson, C. Magnus, 730
Jaffe, William L., 708
Jakob, Franz, 840
Jazrawi, Laith M., 781
Jenny, Jean-Yves, 898
Jensen, Claus Munk, 312
Jeon, Dae-Geun, 187
Jergesen, Harry, 764
Jewett, Charles W., 616
Jiranek, William A., 33
Jobin, Sherry, 724
Johansson, Carina B., 730
Johnson, Lanny L., 91
Johnson, Linda J., 724
Johnson, Nigel, 677
Jonsson, Kjell, 138
Journeaux, Simon F., 677
Judet, T., 45

Kabo, J. Michael, 860
Kamaric, Emir, 102
Kanamono, Toshihisa, 918
Karlsson, Magnus, 319
Kärrholm, J., 266
Kärrholm, Johan, 9
Kaufman, Sherwin, 265
Kautiainen, H., 657
Kawai, Akira, 187
Kawamoto, Kouichi, 918
Keating, E. Michael, 29, 123, 964
Keggi, Kristaps J., 827
Kempenaar, Jake W., 115
Kennedy, J. W., 603
Kesteris, Uldis, 138
Khoury, Alfred, 756
Kienapfel, H., 355
Kim, Carrie, 326
Kim, Jun-Shik, 538
Kim, Yong H., 500
Kim, Yong Sik, 426
Kim, Young-Hoo, 538
King, R., 1030
Kitamura, Shinji, 918
Klapperich, Catherine, 877
Klekamp, John, 339
Knight, Jonathan L., 832
Komistek, Richard D., 293, 738
Koorevaar, Rinco Th., 796
Krackow, Kenneth A., 446, 930, 994
Krebs, D. E., 52
Kremchek, Timothy, 810
Krygier, Jan J., 347
Kudrna, J. C., 988
Kulkarni, Shrikant, 892
Kummer, Frederick J., 509
Kurtz, Steven M., 616

Lachiewicz, Paul F., 288
Lai, Jiann-Horng, 940
Larson, Christopher M., 288
Laurencin, Cato T., 903
Lavernia, C. J., 669
Lavernia, Carlos J., 369
Lebech, Anna, 77
Lee, Jo-ann, 810
Lee, Kuang-Sheng, 822
Lee, Po-Cheng, 976
Lee, Thay Q., 493
Lee, Ye-Ming, 940
Lehtimäki, M. Y., 657
Lehto, M. U. K., 657
Lemmens, Albert, 796
Le Mouël, S., 1005
Leopold, Tammy, 761
Lester, D. Kevin, 200
LeWallen, David G., 426
Li, Emile, 964
Liau, Jiann-Jong, 940
Lieberman, Jay R., 860
Lin, Jian-hao, 775
Lindstrand, Anders, 144
Lo, Wei-Hee, 822
Lonner, Jess H., 488, 911, 969
Lopez-Quiles, Daniel, 204
Lotke, Paul A., 533, 647, 911
Louwerse, R. T., 391
Lu, Hou-shan, 775
Lund, Bjarne, 77
Lung, Chen-Yu, 822

Macdonald, Warren, 730
Maestro, Antonio, 898
Maheshwer, C. B., 603
Malchau, H., 266
Malchau, Henrik, 407, 414, 1024
Mann, Alison, 589
Mann, R. W., 52
Markel, David C., 227, 514
Markel, Sheldon F., 227
Marson, Blake M., 197
Mason, Michael D., 473
Masri, Bassam A., 209, 952
Masterson, Eric, 952
Masterson, Eric L., 59
Matejczyk, Mary-Blair, 1011
Matsuda, Shuichi, 82, 566
Matsunobu, Tomoya, 566
Mawhinney, R. R., 1030
Maynard, Michael, 903
McCarthy, Daniel S., 82
McCarthy, Joseph C., 810
McCreath, Stewart W., 581
McGibbon, C. A., 52
McGrory, Brian J., 869
McGuigan, Francis X., 549
McPherson, Edward J., 882
Meding, John B., 29, 123, 964
Menezes, Alia, 651
Menon, Dipen K., 581
Messieh, Michael, 724
Meunier, Alain, 701
Mihalko, William M., 994
Mikhail, Miriam N., 849
Mikhail, W. E. Michael, 849
Miura, Hiromasa, 566
Mokhtee, D., 988
Mont, Michael A., 446, 930
Morgan, David A. F., 677
Motykie, G. D., 988
Mow, Christopher S., 775
Muirhead-Allwood, S. K., 788
Muirhead-Allwood, Sarah K., 682, 945
Mungall, D. R., 988
Murcia, Antonio, 898
Murcia-Mazón, A., 233
Murray, D. W., 439

Nadeem, Rana Dilawaiz, 630
Nagamine, Ryuji, 566
Naima, V. S. N., 3
Nasser, Sam, 514
Nassif, Jeffrey M., 769
Neander, Gustaf, 64
Nemzek, Jean A., 91
New, A. M. R., 854
Newman, R. J., 1030
Neyman, C., 333
Nielsen, Hans Jørgen, 312
Nielsen, Jørn Dalsgaard, 312
Nielsen, Poul T., 77
Nilsson, Kjell G., 9
Nilsson, Olle, 1019
Ninomiya, James T., 803
Nizard, Rémi S., 701
Noble, J., 895

Noble, Philip C., 102
Norris, Linda R., 882
Northcut, Eric J., 738
Northmore-Ball, M. D., 854

Oberholzer, Rolf, 131
O'Connell, John X., 952
Önnerfält, Rolf, 138
Ordoñez, José, María, 815
Orler, Renee, 982
Ortiguera, Cedric J., 21
Owens, Patrick, 369
Oxley, Cubyson M., 500

Paavilainen, Timo, 305
Paavolainen, Pekka, 272
Pai, V. S., 380, 633
Pak, Kevin I., 781
Parker, Andrew W., 738
Patel, Jig, 635
Pedlow, Frank X., 969
Pekkarinen, Jouko, 305
Penner, Murray J., 209
Petersen, Michael M., 77
Piatkowski, Anna M., 200
Pilegaard, Rita, 312
Piotrowski, Gary A., 743
Poss, Robert, 473
Pottenger, Lawrence A., 743
Prats, Santiago Bello, 815
Pruitt, Lisa, 616, 877
Puhl, Wolfhart, 645
Pukkala, Eero, 272
Pulkkinen, Pekka, 272
Pulliam, Ian T., 21
Puusa, Asko, 305

Qureshi, G. Dastgir, 108

Radcliffe, G. S., 38
Rader, Christof P., 840
Radford, Warwick J. P., 635
Rahimtoola, Zulfiquar O., 662
Rai, N. N., 867
Ranawat, Anil, 149
Ranawat, Chitranjan S., 456
Rand, James A., 533
Rech, J. A., 439
Reed, M. R., 383
Regnér, Hans, 414
Reigstad, A., 689
Richards, R. R., 220
Ries, Michael D., 764, 877
Ringsberg, Karin, 319
Ritter, Merrill A., 29, 123, 769, 964
Rokkum, M., 689
Roberts, Daniel, 616
Robertsson, Otto, 138
Rodriguez, J. A., 669
Roehr, Bernard A., 771
Rogers, David E., 903
Rosenthall, Leonard, 71
Rothman, Richard H., 281, 571, 872, 901
Rushton, Scott A., 872
Ryd, Leif, 144, 589

Sakalkale, Durgadas, 872
Sakalkale, Durgadas P., 571
Sala, M., 610
Saleh, Khaled J., 527
Saleh, Lena, 527
Salib, David, 326
Salom, Marta, 204
Salvati, Eduardo A., 456, 903
Sánchez-Sotelo, Joaquín, 815
Sandoval, Miguel G., 898
Sawant, Milind, 892
Sawyer, Aenor, 159
Schatzker, Joseph, 527
Schemitsch, E. H., 220
Scher, David M., 500
Schmalzried, Thomas P., 326
Schreurs, B. Willem, 796
Schütze, Norbert, 840
Scott, James E., 635
Scott, Richard D., 488, 553, 766
Scranton, Pierce E., Jr., 182
Sculco, Thomas P., 456, 651
Sedel, Laurent, 701
Seldes, Richard M., 533
Sener, Nadir, 112
Sethuraman, Venkat, 281
Shah, Sapna, 509
Shaieb, Mark D., 432
Sharkey, Peter F., 281, 426, 549
Sharp, R., 800
Sharrock, Nigel, 651
Shepard, Michael F., 860
Shergill, N., 788
Shih, Chun-Hsiung, 976
Siebenrock, Klaus, 131
Siguier, M., 45
Siguier, T., 45
Siliski, John M., 488, 969
Sim, Franklin H., 519
Simon, Robin G., 118
Siney, P. D., 867
Singerman, R., 603
Sinnenberg, Robert J., Jr., 108
Sledge, Clement B., 473
Sledge, John B., 982
Smith, Paul N., 235
Smith, S., 3
Solberg, Brian D., 827
Sommerville, Scott M. M., 677
Song, Michael, 149
Spangehl, Mark J., 952
Spittlehouse, A. J., 957
Spotnitz, William D., 481
Sprey, C., 355
Steinberg, Gerald, 372
Stenström, Anders, 589
Sterner, Thomas, 840
Stiehl, James B., 281, 293
Stone, M. H., 38
Stuchin, Steven A., 781
Stulberg, Bernard N., 165, 1011
Suárez-Suárez, M. A., 233
Sugano, Nobuhiko, 102
Swienckowski, John J., 172
Swodboda, Bernd, 553
Sychterz, Christi, 637
Szuszczewicz, Edward S., 326

Tai, Ching-Lung, 976
Tamir, L., 333
Tan, Virak, 533
Tanner, K. E., 610, 854
Tanzer, Michael, 347
Taylor, M., 610
Thanner, J., 266
Thomas, William H., 473
Tile, Marvin, 527
Toh, Kai-Kai, 347
Tokish, J. T., 197
Toksvig-Larsen, Søren, 77, 144, 589
Tomichan, M. C., 38
Torro, Vicente, 204
Trahan, C. A., 52
Traina, Steve M., 738
Trinidad, Gerardo, 505
Trippel, S. B., 52
Trousdale, Robert T., 386
Tu, Yuan-Kun, 976
Tucker, J. K., 470
Turner, Roderick H., 810

Ugutmen, Ender, 112
Ullmark, Gösta, 1019
Urabe, Ken, 566

van der Heide, Huub J. L., 796
van Kampen, Albert, 796
Vaquero, Daniel H., 898
Viceconti, Marco, 215
Visuri, Tuomo, 272
von Sivers, Karin, 64

Walch, Gilles, 756
Walker, Peter S., 682, 945
Wan, Zhinian, 149
Wang, Gwo J., 481
Wardell, Steven R., 766
Watson, Brandi N., 432
Weidenhielm, Lars R. A., 849
Welch, Richard B., 122
Wertenbruch, Joerg M., 200
Westrich, Geoffrey H., 456, 651
White, Stephen E., 82
Whitehurst, Jon B., 743
Whiteside, Leo A., 82
Wilde, Alan H., 165, 1011
Wilke, A., 355
Wilson, P., 470
Wingstrand, Hans, 138
Wood, Adam, 738
Woodsome, Terry, 149
Woolson, Steven T., 159, 662
Worland, Richard L., 108
Wretenberg, Per, 849
Wright, R. John, 473
Wroblewski, B. M., 867

Yamaguchi, Motoi, 165, 464, 1011
Yamauchi, Ken-ichi, 918
Yang, Chyun-Yu, 375
Yoo, Ju-Hyung, 714
Yoon, Taek-Rim, 446, 930
Yoon, Wai Weng, 945
Yugue, I., 45

Zadeh, Hamid G., 682
Zahiri, Christopher A., 326
Zatorski, Laurine E., 827
Zebala, L. P., 988
Ziv, Israel, 98
Zomer, R., 333
Zuckerman, Joseph D., 500